Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

Claim 1 (canceled):

Claim 2 (currently amended): The method of claim ~~1~~ 17 further comprising adding a second biologically active agent to the polymer and biologically active agent mixture.

Claim 3 (currently amended): The method of claim ~~1~~ 17 wherein applying the first layer coating comprises dipping the stent into the polymer and biologically active agent mixture.

Claim 4 (currently amended): The method of claim ~~1~~ 17 wherein applying the first layer coating comprises spraying the polymer and biologically active agent mixture onto the stent.

Claim 5 (currently amended): A method for preventing burst release of a biologically active agent dispersed in a thin film polymer layer on a stent comprising applying a second layer over

the thin film polymer layer; said second layer being comprised of a hydrophobic heparinized polymer comprising a macromolecule, a hydrophobic material, and heparin bound together by covalent bonds, wherein the macromolecule comprises a protein ~~or a biopolymer~~ selected from protamine, polylysine, polyaspartic acid, polyglutamic acid, and their derivatives and copolymers, or wherein the hydrophobic material is selected from octadecylamine, alkanoic amine, bile acids, sterols, alkanoic acids, and mixtures thereof.

Claim 6 (currently amended): A method for inhibiting thrombosis in a medical device having a surface in contact with an organic fluid comprising coating the surface of the medical device with an antithrombogenic heparinized polymer layer comprising a macromolecule, a hydrophobic material, and heparin bound together by covalent bonds, wherein the macromolecule comprises a protein ~~or a biopolymer~~ selected from protamine, polylysine, polyaspartic acid, polyglutamic acid, and their derivatives and copolymers, or wherein the hydrophobic material is selected from octadecylamine, alkanoic amine, bile acids, sterols, alkanoic acids, and mixtures thereof.

Claim 7 (original): The method of claim 6 further comprising applying a lowermost coating, said lowermost coating disposed

under the hydrophobic heparinized polymer layer and comprising an polymer having a biologically active agent dispersed therein.

Claim 8 (currently amended): The method of claim ~~1~~ 17 wherein the polymer film is selected from polyurethanes, polyethylene terephthalate, PLLA-poly-glycolic acid (PGA) copolymer (PLGA), polycaprolactone, poly-(hydroxybutyrate/hydroxyvalerate) copolymer, poly(vinylpyrrolidone),polytetrafluoroethylene, poly(2-hydroxyethylmethacrylate), poly(etherurethane urea), silicones, acrylics, epoxides, polyesters, urethanes, parlenes, polyphosphazene polymers, fluoropolymers, polyamides, polyolefins, and mixtures thereof.

Claim 9 (currently amended): The method of claim ~~1~~ 17 wherein the biologically active agent dispersed in the first layer is selected from antithrombotics, anticoagulants, antiplatelet agents, thrombolytics, antiproliferatives, anticancer drugs, antiinflammatory drugs, agents that inhibit restenosis, smooth muscle cell inhibitors, antibiotics, and mixtures thereof.

Claims 10-15 (canceled)

Claim 16 (currently amended): The method of claim ~~1~~ 17 wherein the heparin is selected from recombinant heparin, hep rin derivatives, and heparin analogues.

Claim 17 (previously presented): A method for preparing an article of manufacture comprising a stent and a coating disposed thereon, the coating comprising a first layer and a second layer, the first layer comprising a polymer film with a biologically active agent dispersed therein, and the second layer comprising an antithrombogenic heparinized polymer comprising a macromolecule, a hydrophobic material, and heparin bound together with covalent bonds, wherein the macromolecule comprises a protein selected from protamine, polylysine, polyaspartic acid, polyglutamic acid, and their derivatives and copolymers, the method comprising:

cleaning the stent with a washing agent,

preparing the first layer by combining the polymer and biologically active agent with a solvent, thereby forming a polymer and biologically active agent mixture and applying the mixture to the stent,

preparing the second layer by combining the antithrombogenic heparinized polymer with a solvent and applying the second layer by immersing the stent in the antithrombogenic heparinized polymer and solvent solution and then drying the stent.

Claim 18 (currently amended): A method for preparing an article of manufacture comprising a stent and a coating disposed thereon, the coating comprising a first layer and a second layer, the first layer comprising a polymer film with a biologically active agent dispersed therein, and the second layer comprising an antithrombogenic heparinized polymer comprising a macromolecule, a hydrophobic material, and heparin bound together with covalent bonds, wherein the macromolecule comprises a biopolymer selected from ~~polysaccharides,~~ gelatin, collagen, alginate, hyalunic acid, alginic acid, carrageenan, chondroitin, pectin, chitosan, and their derivatives and copolymers, the method comprising:

cleaning the stent with a washing agent,

preparing the first layer by combining the polymer and biologically active agent with a solvent, thereby forming a polymer and biologically active agent mixture and applying the mixture to the stent,

preparing the second layer by combining the antithrombogenic heparinized polymer with a solvent and applying the second layer by immersing the stent in the antithrombogenic heparinized polymer and solvent solution and then drying the stent.

Claim 19 (previously presented): A method for preparing an article of manufacture comprising a stent and a coating disposed

thereon, the coating comprising a first layer and a second layer, the first layer comprising a polymer film with a biologically active agent dispersed therein, and the second layer comprising an antithrombogenic heparinized polymer comprising a macromolecule, a hydrophobic material, and heparin bound together with covalent bonds, wherein the hydrophobic material is selected from octadecylamine, alkanoic amine, bile acids, sterols, alkanoic acids, and mixtures thereof, the method comprising:

cleaning the stent with a washing agent,

preparing the first layer by combining the polymer and biologically active agent with a solvent, thereby forming a polymer and biologically active agent mixture and applying the mixture to the stent,

preparing the second layer by combining the antithrombogenic heparinized polymer with a solvent and applying the second layer by immersing the stent in the antithrombogenic heparinized polymer and solvent solution and then drying the stent.

Claim 20 (new): The method of claim 19 further comprising adding a second biologically active agent to the polymer and biologically active agent mixture.

Claim 21 (new): The method of claim 19 wherein applying the first layer coating comprises dipping the stent into the polymer and biologically active agent mixture.

Claim 22 (new): The method of claim 19 wherein applying the first layer coating comprises spraying the polymer and biologically active agent mixture onto the stent.

Claim 23 (new): The method of claim 19 wherein the polymer film is selected from polyurethanes, polyethylene terephthalate, PLLA-poly-glycolic acid (PGA) copolymer (PLGA), polycaprolactone, poly-(hydroxybutyrate/hydroxyvalerate) copolymer, poly(vinylpyrrolidone),polytetrafluoroethylene, poly(2-hydroxyethylmethacrylate), poly(etherurethane urea), silicones, acrylics, epoxides, polyesters, urethanes, parlenes, polyphosphazene polymers, fluoropolymers, polyamides, polyolefins, and mixtures thereof.

Claim 24 (new): The method of claim 19 wherein the biologically active agent dispersed in the first layer is selected from antithrombotics, anticoagulants, antiplatelet agents, thrombolytics, antiproliferatives, anticancer drugs, antiinflammatory drugs, agents that inhibit restenosis, smooth muscle cell inhibitors, antibiotics, and mixtures thereof.

Claim 25 (new): The method of claim 19 wherein the macromolecule comprises a protein selected from protamine, polylysine, polyaspartic acid, polyglutamic acid, and their derivatives and copolymers.

Claim 26 (new): The method of claim 19 wherein the heparin is selected from recombinant heparin, heparin derivatives, and heparin analogues.